

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/00491

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 A61K38/16 A61K48/00 //C07K14/065

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 A61K C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KRATHWOHL M.D. ET AL: "Functional characterization of the C-C chemokine like molecules encoded by mollusum contagiosum virus type 1 and 2" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA, vol. 94, 1997, pages 9875-9880, XP002104175 cited in the application see abstract see figure 1 see figures 3,4 see page 9879, paragraph 3	1-14, 20-23
Y	---	15-19
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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the international search

28 May 1999

Date of mailing of the international search report

16/06/1999

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 99/00491

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 96 33730 A (UNIV TORONTO) 31 October 1996 see page 8, line 1 - line 26 see page 12, line 11 - line 25 ---	15-19
X,P	DAMON I ET AL: "Broad spectrum chemokine antagonistic activity of a human poxvirus chemokine homolog" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES USA, vol. 95, May 1998, pages 6403-6407, XP002104176 see the whole document ---	1-14, 20-23
E	WO 99 09178 A (HROMAS ROBERT ;BROWN DARRON R (US); BROXMEYER HAL E (US); FIFE KEN) 25 February 1999 see claims 40-61; figure 1B see page 64, line 5 - line 17 see page 65, line 18 - line 30 see page 66, line 1 - page 67, line 16 see page 69, line 3 - line 28 see page 70 - page 75, line 12 see example 4 -----	1-8, 10-18, 20-23

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 99/ 00491

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 1-19
because they relate to subject matter not required to be searched by this Authority, namely:
See FURTHER INFORMATION SHEET PCT/ISA/210
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Although claims 1-19 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound.

Claims Nos.: 1-19

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by therapy

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 99/00491

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9633730	A	31-10-1996	AU 6237996 A	18-11-1996
			CA 2218499 A	31-10-1996
			EP 0840615 A	13-05-1998
			US 5834419 A	10-11-1998
WO 9909178	A	25-02-1999	AU 9019098 A	08-03-1999

INTERNATIONAL SEARCH REPORT

Intern. Patent Application No

PCT/US 98/16845

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 C12N15/39 C07K14/065 C07K16/08 C12N5/10 A61K48/00
 G01N33/68 G01N33/50

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C07K A61K C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>T. G. SENKEVICH ET AL: "Genome sequence of a human tumorigenic poxvirus: Prediction of specific host response evasion genes "</p> <p>SCIENCE., vol. 273, 9 August 1996, pages 813-816, XP002087266 LANCASTER, PA US cited in the application see the whole document</p> <p style="text-align: center;">---</p> <p style="text-align: center;">-/--</p>	<p>1,8,9, 18-25, 34,50</p>



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

9 December 1998

Date of mailing of the international search report

22/12/1998

Name and mailing address of the ISA

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Le Cornec, N

INTERNATIONAL SEARCH REPORT

Intern. .al Application No

PCT/US 98/16845

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	T.G. SENKEVICH ET AL: "The genome of Mollusum contagiosum virus: Analysis and comparison with other poxviruses" VIROLOGY., vol. 233, no. 1, June 1997, pages 19-42, XP002087267 RLANDO US see the whole document especially the abstract, page 28 table 1 and page 38 right column ---	1,8,9, 18-25
P,X	M.D. KRATHWOHL ET AL: "Functional characterizaion of the C-C chemokine like molecules encoded by molusum contagiosum virus types 1 and 2 " PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA., vol. 94, September 1997, pages 9875-9880, XP002087268 WASHINGTON US cited in the application see the whole document ---	1-25,34, 40,43, 48,50
P,X	J.J. BUGERT ET AL: "Chemokine homolog of Mollusum contagiosum virus: Sequence conservation and expression" VIROLOGY., vol. 242, no. 1, 1 March 1998, pages 51-59, XP002087269 ORLANDO US see the whole document ---	1-25
P,X	I. DAMON ET AL: "Broad spectrum chemokine antagonistic activity of a human poxvirus chemokine homolog" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA., vol. 95, May 1998, pages 6403-6407, XP002087270 WASHINGTON US see the whole document -----	1-25,34, 40,43, 48,50

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 98/ 16845

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
Please see Further Information sheet enclosed
2. ☒ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
Claims 29-31, 49 and 54 have not been searched due to a lack of characterization in the description of a modulator of inflammatory response, of an enhancer of chemokine-like MCV viral protein and of an inhibitor of chemokine-like MCV viral protein.
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Remark : Although claims 26-28,32-33,40-42,50-53, 55-61 and claims 34-39 (as far as they concern in vivo methods) are directed to a method of treatment of the human/animal body (rule 39.1 IV PCT), the search has been carried out and based on the alleged effects of the compound/ composition.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Although claims 26-28,32-33,40-42,44-47,50-53,55-61 and claims 34-39 (as far as they concern in vivo methods) are directed to a method of treatment of the human/animal body (rule 39.1 IV PCT), the search has been carried out and based on the alleged effects of the compound/composition.